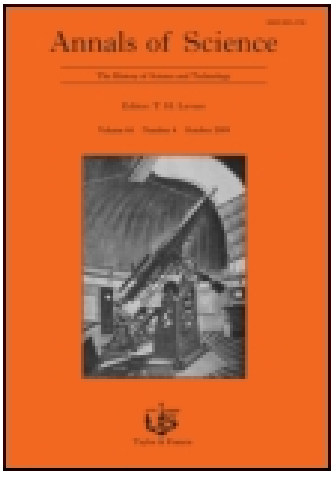
This article was downloaded by: [Memorial University of Newfoundland]
On: 07 October 2014, At: 17:48
Publisher: Taylor & Francis
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Annals of Science
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/tasc20

Entering Dubious Realms: Grover Krantz, Science, and Sasquatch

Brian Regal [a]

[a] History Department , Kean University , 1000 Morris Ave., Union, NJ, 07083, USA

Published online: 13 Feb 2009.

To cite this article: Brian Regal (2009) Entering Dubious Realms: Grover Krantz, Science, and Sasquatch, Annals of Science, 66:1, 83-102, DOI: 10.1080/00033790802202421

To link to this article: http://dx.doi.org/10.1080/00033790802202421

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

Annals of Science,
Vol. 66, No. 1, January 2009, 83–102

Taylor & Francis
Taylor & Francis Group

Entering Dubious Realms: Grover Krantz, Science, and Sasquatch

Brian Regal

History Department, Kean University, 1000 Morris Ave., Union, 07083 NJ, USA.
Email: brian.regal@gmail.com

Received 14 May 2008. Revised paper accepted 14 May 2008

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

Summary

Physical anthropologist Grover Krantz (1931–2002) spent his career arguing that the anomalous North American primate called Sasquatch was a living animal. He attempted to prove the creature's existence by applying to the problem the techniques of physical anthropology: methodologies and theoretical models that were outside the experience of the amateur enthusiasts who dominated the field of anomalous primate studies. For his efforts, he was dismissed or ignored by academics who viewed the Sasquatch, also commonly called Bigfoot, as at best a relic of folklore and at worst a hoax, and Krantz's project as having dubious value. Krantz also received a negative reaction from amateur Sasquatch researchers, some of whom threatened and abused him. His career is best situated therefore as part of the discussion about the historical relationship between amateur naturalists and professional scientists. The literature on this relationship articulates a combining/displacement process: when a knowledge domain that has potential for contributions to science is created by amateurs, it will eventually combine with and then be taken over by professionals, with the result that amateur leadership is displaced. This paper contributes to that discussion by showing the process at work in Krantz's failed attempt to legitimize Bigfoot research by removing it from the amateur sphere and repositioning it in the professional world of anthropology.

Contents

1. Introduction. . . . 84
2. Amateurs and professionals 85
3. Sasquatch literature 86
4. A field is born 87
5. Krantz enters the field 89
6. Krantz's evidence 90
7. Gigantopithecus theory 91
8. Krantz and evolution 93
9. Problems arise 95
10. Conflict with the Establishment 96
11. Dermal ridges 98
12. Conclusion 99
13. Acknowledgements 102

Annals of Science ISSN 0003-3790 print/ISSN 1464-505X online © 2009 Taylor & Francis
http://www.tandf.co.uk/journals
DOI: 10.1080/00033790802202421

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

1. Introduction

Grover Sanders Krantz (1931–2002) took the most prominent and active role in the search for the anomalous primate known as Sasquatch of any American physical anthropologist. He took this role to prove the creature's existence and to legitimize its study, and in that process to take anomalous primates out of the hands of amateurs and place them in the hands of professionals where he believed they belonged. Though he articulated an explanatory paradigm for the Sasquatch that linked it to the Asian fossil primate *Gigantopithecus blacki*, it was not well received.[1] Early in his career, he told a magazine editor that the reactions to an article that contained some of his comments 'have already damaged my professional reputation and exposed me to public ridicule by my peers'.[2] Later he claimed that a career chasing Sasquatch had exacted a price from him in 'time, money, and professional reputation, not to mention social ridicule'.[3]

A negative reaction to Krantz's work might be expected from mainstream anthropologists, but he was derided by amateurs as well. Part of the reason for this is that because he considered himself in the mainstream of anthropology, Krantz took a condescending view of most of the amateur Bigfoot enthusiasts. He was seen by some of them as a classroom-bound egghead come to show the crackpots how it was done and to steal their prize. Krantz also claimed he could not be fooled by hoaxers, though he was taken in by artefacts of questionable authenticity. His claim of infallibility only deepened the amateurs' skepticism of his methods and motives. In later years, Sasquatch enthusiast Gian Quasar growled contemptuously that 'more than anything Krantz's entrance into Bigfootery [sic] was a death blow' because of his tendency to fall prey to hoaxers. He called Krantz the 'Falstaff' of the field for his unwarranted arrogance.[4] In a review of Krantz's *Bigfoot/Sasquatch Evidence* (1999), leading amateur researcher Daniel Perez, while calling Krantz 'the most widely recognized academic authority on the subject', found some of his work 'questionable'. He said that Krantz had accepted as genuine a set of track casts which had been intentionally faked in order to test Krantz's mettle. 'He took the bait', Perez lamented, 'and endorsed them as real'.[5] René Dahinden (1930–2001), the Grand Old Man of amateur Bigfoot hunting, once sputtered to Krantz, 'every time you open your mouth to the press you make a bunch of down right stupid statements'. Krantz's counterpart and primary adversary, Dahinden then threatened, 'I will pull you down and blackball you in the Sasquatch research'.[6]

---

[1] A poll conducted in the early 1980s found the majority of professional anthropologists in North America felt there was no acceptable evidence for the existence of Sasquatch and thus little justification for any funded research into it. Richard Greenwell and James E. King, 'Attitudes of Physical Anthropologists towards Reports of Bigfoot and Nessie', *Current Anthropology*, 22 (February, 1981), 79–80. Researcher Chad Arment said that when he attempted to poll current anthropologists about anomalous primates 'The response was less than stellar'. Chad Arment, 'Review of *Bigfoot Exposed*', *North American BioFortean Review*, 7:2:17 (July, 2005), 24.

[2] Al Stump. 'The Man Who Hunts Bigfoot', *True*, 56:456, May, 1975, 28–31, 74–77. The quote is from Grover Sanders Krantz to Robert Gottlieb, 6/24/1975, folder 0334, box 3, Grover Krantz Papers Collection, National Anthropological Archive, Smithsonian Institution, hereafter NAA. Also from here Grover Sanders Krantz will be abbreviated as GSK.

[3] Vladimir Markotic and Grover Krantz eds., *The Sasquatch and Other Unknown Hominoids* (Calgary, 1984), 147.

[4] Gian Quasar, Bermuda-triangle.org (2006).

[5] Daniel Perez, Center for Bigfoot Studies, CA, 'Review of *Bigfoot/Sasquatch Evidence*', 1999.

[6] René Dahinden to GSK, 5/12/1975, folder 0334, box 3, NAA. For the life and work of René Dahinden see Don Hunter and René Dahinden, *Sasquatch/Bigfoot* (Toronto: McClelland and Stewart Inc., 1993).

Figure 1. Bossburg Cripplefoot tracks. It was this set of tracks that helped convince Grover Krantz that Bigfoot was a living animal. Note the two projections on the outside of the left foot and the misshapen toes. Thanks to Christopher Murphy and Hancock House Publishing for the use of the photo.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

2. Amateurs and professionals

Enthusiasm for natural history goes back to the late fifteenth and early sixteenth centuries in Europe. It began with what Brian Ogilvie calls the 'science of describing' while engaging in what practitioners considered an improving pastime. These activities slowly grew more sophisticated and theoretical—and eventually professional.[7] A similar tradition developed in the Americas. Early American naturalists like John and William Bartram, Cadwallader Colden and others added considerable amounts of empirical data to the knowledge of American natural history.[8] Robert Silverberg traces the work of amateur naturalists in America who were especially interested in the history of the Native Americans.[9] Silverberg shows how the amateurs developed the myth of a glorious lost race of Mound Builders. Ultimately, the myth of the Mound Builders was toppled by the work of a growing cadre of professional scientists associated with the new government sponsored Smithsonian Institution, Bureau of American Ethnology, and the US Geological Survey.

Dahinden was a genuine force and one of the most prominent amateur Sasquatch researcher of the twentieth century.

[7] Brian W. Ogilvie, *Science of Describing: Natural History in Renaissance Europe* (Chicago, 2006).

[8] See Thomas P. Slaughter, *The Natures of John and William Bartrum* (New York, 1996) and Howard Ensign Evans, *Pioneer Naturalists: The Discovery and Naming of North American Plants and Animals* (New York: Henry Holt & Co., 1993) and Robert Elman, *First in the Field: America's Pioneering Naturalists* (New York, 1977).

[9] Robert Silverberg, *Mound Builders of Ancient America: The Archaeology of a Myth* (Greenwich, CT, 1968).

Mark Barrow shows how bird watching in nineteenth-century America began as an amateur pastime which also followed a 'culture of collecting'. In the 1880s, professional ornithologists began to exert influence by enforcing species naming procedures and other forms of standardization.[10] What these new workers did was to take the Indians and birds out of the hands of the self-financed, self-motivated amateur naturalists and place them in the hands of the professional, work-a-day, government and university affiliated scientists. As Robert Kohler shows, professionals did not push out their rivals completely; they utilized the skills and enthusiasms of the amateurs to build up enormous compendiums of biological data. The professionals took the previously ad hoc and haphazard collecting impulse, and organized it under their leadership.[11] A similar path is traced by David Allen with the British naturalist experience where a culture of enthusiastic amateurs roamed about the countryside collecting and measuring.[12]

The increasing reliance upon theoretical modelling by professionals and the continued focus on the simple classification and catalogueing work of the amateurs laid the groundwork for a trend in which the domain of passionate amateurs was transformed into the stronghold of dispassionate professionals. This scenario is what was playing out between Grover Krantz and the monster hunters of the latter twentieth century. They too focused on the science of describing and collecting while he worked to make the subject of anomalous primates more theoretical and professional.

3. Sasquatch literature

There is a voluminous popular literature on anomalous primates. A common structure to these works is to present contemporary and historical eyewitness encounters with the notion that a bulk of such material proves the existence of the creatures despite the fact that no actual remains have been recovered.[13] This is a standard approach in the amateur's repertoire (it is the same approach taken by ufologists as well as lake and sea monster hunters). Some examples of scholarly articles on anomalous primates are Strasenburgh and then Gill, who discuss the validity of the evidence, and Murad who suggests using Sasquatch as a critical thinking exercise for students.[14] The majority of scholarly works since the 1960s have

[10] Mark V. Barrow Jr. *A Passion for Birds: American Ornithology after Audubon* (Princeton, NJ, 1998).
[11] Robert E. Kohler. *All Creatures: Naturalists, Collectors, and Biodiversity, 1850–1950* (Princeton, NJ, 2006).
[12] David Elliston Allen, *The Naturalist in Britain: A Social History* (London, 1976).
[13] Some of the better examples are, John Green, *Year of the Sasquatch: encounters with Bigfoot from California to Canada* (Agassiz, BC, 1970), Christopher Murphy, *Meet the Sasquatch* (Surrey, BC, 2004), Loren Coleman, *Bigfoot! The true story of apes in America* (New York, 2003), and Jeff Meldrum, *Sasquatch: Legend Meets Science* (New York, 2006).
[14] Gorden Strasenburgh, 'On *Paranthropus* and 'relic hominids',' *Current Anthropology*, 16 (1975), 486–87. G.W. Gill, 'Population clines of the North American Sasquatch as evidenced by track lengths and estimated statures', in *Manlike Monsters on Trail: early records and modern evidence*. M. Halpin and M.M. Ames eds. (Vancouver, 1980). Turhon A. Murad, 'Teaching Anthropology and Critical Thinking with the Question 'Is there something Big Afoot?' *Current Anthropology*, 29:5 (December, 1988), 787–89. Also see Bacil F. Kirtley, 'Unknown Hominids and New World Legends', *Western Folklore*, 23 (April, 1964, 77–90. Linda Milligan, 'The 'Truth' about the Bigfoot Legend', *Western Folklore* 49 (January, 1990), 83–98, Phillips Stevens Jr., "New' Legends: some perspectives from anthropology', *Western Folklore*, 49 (January, 1990), 121–33, and Peter Dendle, 'Cryptozoology in the Medieval and Modern Worlds', *Folklore*, 117 (August, 2006), 190–206.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

been from folklorists who look at the narrative and legendary quality of stories and sightings, and attempt to place them in a relationship to 'wild man' legends from across time and cultures.

There have been few scholarly studies of the lives and work of anomalous primate researchers, and little historiographic analysis of the field as a whole, aside from a scattering of popular online profiles—most which simply republish the same few bits of information.[15] The career of Grover Krantz has been overlooked by historians of science largely because many mainstream scientists considered research into anomalous primates a form of pseudo-science without intellectual merit.[16] As such, Krantz's career would seem to fall into what Thomas Gieryn has termed 'boundary-work', but it does not.[17] Krantz thought he was bringing an under-appreciated anthropological subject to his colleagues, not engaging in pseudo-science. Taken as a whole, his writings make it clear that as far as he was concerned, he was doing nothing more unusual than investigating a living species as part of the overall study of hominid evolutionary mechanics. Despite the sensational aspect of anomalous primates, Krantz was attempting something rather modest. He was not introducing any new or radical techniques or methodologies as scientists in other fields have tried.

In his study of ostracized scientists, Jan Sapp shows how a group of geneticists argued that the role of genes in heredity and evolution they put forward in the 1950s was at odds with most of their colleagues. They employed new techniques and subject organisms to create a new paradigm for how genetics worked. They were opposed by the mainstream and eventually written out of genetics history because of it.[18] Like that of the geneticists, Krantz's evidence was rejected as too unusual, unreliable, not thoroughly argued, and possibly fraudulent. Explaining what Krantz was doing will help clear up some of the confusion and help place him and the search for anomalous primates into this historical context.

4. A field is born

While reports and legends about hairy humanoids in North America preceded the arrival of Europeans, the modern field of anomalous primate studies began to coalesce in the 1950s, when a rash of sightings and encounter stories appeared in the US Pacific Northwest and Western Canadian press, prompting a loose affiliation of journalists, outdoorsmen, and amateur naturalists to investigate. This burst of activity was itself partly stimulated by the sensation then being generated in the UK

[15] Typical online sources are *Cryptomundo* and *On the Trail of Sasquatch*. There are a few popular biographies including Loren Coleman, *Tom Slick: True Life Encounters in Cryptozoology* (Fresno, CA, 2002) and Greg Long, *The Making of Bigfoot: The Inside Story* (New York, 2004) on the life of Roger Patterson. Also see Kenneth Wylie, *Bigfoot: A Personal Inquiry into a Phenomenon* (New York: Viking Press, 1980).

[16] Donna Haraway looks at those who study monkeys and apes to see if any cultural patterns or narratives exist in their work. Her *Primate Visions* (1989), however, does not address anomalous members of the group or the researchers involved. Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York, 1989).

[17] Thomas F. Gieryn, 'Boundary-Work and the Demarcation of Science from Non-Science: strains and interests in professional ideologies of scientists', *American Sociological Review* 48 (December, 1983), 781–95.

[18] Jan Sapp, *Beyond the Gene: Cytoplasmic Inheritance and the struggle for Authority in Genetics* (New York: Oxford University Press, 1987) and *Where the Truth Lies: Franz Moewus and the Origins of Molecular Biology* (Cambridge, 1990).

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

over reports coming in from Nepal about the yeti, or 'Abominable Snowman'. While there was some initial interest from mainstream scientists in these reports, by the time Krantz entered the world of anomalous primate studies in the early 1970s it mainly comprised factions of obsessive amateurs. It was a field whose often quirky members craved scientific respectability and recognition for their work, despite being wary of the theoretical and advanced techniques of modern laboratory biology. Few of them had any formal training in the sciences, but all were passionate about anomalous primates. The field techniques of the Bigfoot hunters are much like those of bird watchers: they go into wilderness areas where they think the creature might lurk and set about making observations. Instead of birdcalls, they employ lures like pheromone soaked cards, food bait, recorded primate vocalizations, and wood knocking to attract their quarry. Then, they wait patiently and expectantly for a fleeting glimpse of the creature with infrared cameras and motion detectors (shooting a specimen is opposed). Yet despite the hardware and enthusiasm, they have no uniform standards for interpreting the evidence they gathered and no organizing goals—other than proving the creature real.

Underneath their enthusiasm, Bigfoot hunters knew they ran risks if they succeeded. Should they finally prove that the creature exists, professionals would then come in and take over the field—as happened previously with birds, fossils, and Indian Mounds. Krantz stated flatly that 'the scientific establishment will simply take over', once the Sasquatch is proved to be real, 'and exclude all amateurs from further investigations'.[19] Another expected scenario is that the government would push aside the discoverer and confiscate the evidence in the way the *Tyrannosaurus rex* named Sue was confiscated from an amateur collector in 1992.[20] Despite these worries, the amateurs regularly chided scientists for not joining them in the field. Author Eric Norman tried to rouse scientists from what he considered their self-imposed slumber by stating that 'it is certainly time that scientists began emerging from their laboratories and moving out from behind their textbooks …' to investigate anomalous primates.[21]

Although the amateurs were normally wary of professionals, a pair of academics, Scotts zoologist Ivan Sanderson (1911–1973) and Belgian naturalist Bernard Heuvelmans (1916–2001), were respected, even revered within the amateur ranks, and were the founding intellectuals of the field of cryptozoology. This was in part because they straddled the line between the amateurs and professionals in having higher degrees in zoology and biology, but not institutional affiliations.[22] Affiliations aside, individuals such as Sanderson and Heuvelmans were few and far between and rarely remained in the field very long.

Despite the perceived dubious nature of the enterprise, some mainstream scientists did take the question of anomalous primates in North America seriously

[19] Vladimir Markotic and GSK. *The Sasquatch and Other Unknown Hominoids* (Calgary, 1984), 62.

[20] In 1990 amateur fossil hunter Peter Larson discovered an almost complete skeleton of a *Trex* in South Dakota. A controversy erupted over ownership and the legality of how it was found. This led to the FBI raiding Larson's lab in 1992, impounding the fossil and jailing him.

[21] Eric Norman. *The Abominable Snowman* (New York, 1969), 22.

[22] Bernard Heuvelmans and Ivan Sanderson are credited with developing the field of cryptozoology although the German rocketry pioneer Willy Ley (1906–1969) was publishing works on the topic around the same time. Ley did not use the term cryptozoology rather referring to his work as 'romantic zoology'. In 1955 Heuvelmans released *Sur la Piste des Bêtes Ignorées* (*On the Track of Unknown Animals*). Sanderson produced *Abominable Snowmen: Legend Come to Life* (Philadelphia, 1961).

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

early on. Harvard-trained anthropologist Carleton Coon dabbled in the field, attaching himself to a yeti hunt in Nepal and later to a Sasquatch hunt in California.[23] The most thorough academic investigation of the topic at this early stage was by then Smithsonian Institution primatologist John Napier (1917–1987). Napier was intrigued by some of the evidence and at points seemed to accept that either the yeti or Sasquatch might exist. In the end, however, he put forward as much evidence against it existing.[24] He said that claiming the creature to be a Neanderthal or *Gigantopithecus* was just an easy way out and did not fit the facts or simple logic. 'By postulating', he said, 'that a monster is a relic form—a hangover from the past—monster fans feel absolved from the necessity of explaining how such an outrageously unsuitable creature has evolved in the light of present-day ecology'.[25] Grover Krantz's work would be a thirty year attempt to provide just such an explanation.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

5. Krantz enters the field

Grover Sanders Krantz was born in Salt Lake City, Utah in 1931. The Krantz's came from a line of Mormons, but Grover was not active in the religion. While he tried to follow a basic Christian philosophy of behaviour and morality, he favoured logic and reason over superstition and dogma.[26] In 1949, he entered the University of Utah to study anthropology but the next year joined the Air National Guard. Honourably discharged in 1953, he transferred to the University of California, Berkeley and resumed his studies, graduating with a degree in anthropology in 1955. As a master's degree student under Theodore D. McCown and others, he worked as a teaching assistant in the anthropology department. McCown, who worked on Neanderthals from the Middle East, publicly commented that the Bigfoot tracks, which had just been found at Bluff Creek, California, were an 'old story'.[27] Showing some familiarity with the topic, McCown said that if the creature was found, it would solve the mystery of the strange tracks that had been discovered for years around the Pacific Northwest.

In 1966, Krantz was awarded a visiting lecturer position at the University of Minnesota. When that ended in 1968, he was offered a full time teaching position at Washington State University. He completed his graduate work and in 1971 was awarded his doctorate in anthropology with a concentration in human evolution from the University of Minnesota.[28]

Grover Krantz's interest in anomalous primates began when he read reports of the yeti of Nepal. He later told Bigfoot hunter Roger Patterson that 'in 1953 I first heard reports about a giant man-like creature in Western North America, and I have been gradually accumulating information on the subject ever since'.[29] In the autumn of 1964, he made his first visit to the Bigfoot site at Bluff Creek, California. The Bluff Creek area became a focal point for Sasquatch enthusiasts as it was the place where

[23] See note 15. Also see note 19.
[24] John Napier, *Bigfoot: the Yeti and Sasquatch in Myth and Reality* (New York, 1972).
[25] Ibid., 162.
[26] 'Christianity and Krantz', dated 1952, Scrapbook of Ester Marie Krantz, box 12, oversize, NAA.
[27] These tracks were found by a logging crew in October of 1958 near Bluff Creek, California. Reports of this event include the first public use of the term Bigfoot. See Coleman, *BigFoot!* for the story of the finding of the tracks. For McCown's quote, see *Daily Humbolt Times*, 15 October 1958.
[28] See folder 0403, box 8 and Krantz curriculum vita, folder 0001, box 1, NAA.
[29] GSK to Roger Patterson, 8/22/1970, folder 0343, box 7, NAA.

the contentious Patterson–Gimlin film was shot.[30] Krantz's first encounter with the Patterson film came, as it did for many, when he saw stills from it published in *Argosy* magazine in early 1968.[31] Unimpressed by what he saw, he said the pictures 'looked to me like someone wearing a gorilla suit'.[32] After seeing the entire Patterson film in 1969, however, he was impressed by the creature's locomotion.

A few months after Krantz saw the Patterson film, he read Canadian Sasquatch enthusiast and journalist John Green's *On the Track of Sasquatch* (1968), with its compendium of eyewitness and historical accounts of the creature. Green, a newspaper editor from British Columbia in the area where sightings of the creature had drawn local attention, said, 'the origin of such a creature is no problem'.[33] In 1946, while attending the University of British Columbia, Green took a course in anthropology that covered all the currently known human and related fossils including *Gigantopithecus.*[34] Green did not claim the creature was a *Gigantopithecus* but claimed that evidence for such a creature living in Asia gave verisimilitude to the idea that a relative might be in North America. He said the description of *Gigantopithecus* was 'a pretty good thumbnail description of what people have been seeing all along'.[35] Krantz was growing more intrigued by the idea of Sasquatch but as an anthropologist needed physical evidence to convince him fully, and which he could in turn take to other anthropologists.

6. Krantz's evidence

Krantz first saw Sasquatch tracks at Bossburg, Washington in 1969 (he never saw the creature itself).[36] Along with many footprints, a local man named Ivan Marx—who had a history of Bigfoot hunting—found a set of unusual handprints in mud and had plaster casts made from them. These casts became the basis of Krantz's first scholarly article on the creature 'Sasquatch Handprints', published in the journal *North American Research Notes.*[37] The sheer size of the prints impressed him, but it was a little thing that was crucial: he noticed that the thenar eminence, the pad of muscle just below the thumb, was greatly reduced. That someone might think to make the prints without opposable thumbs was one thing, but to include the detail of a reduced thenar eminence was something else entirely. No hoaxer would ever think to do such a thing Krantz argued. The arrangement of the musculature as seen in the print he said 'would require someone quite familiar with the anatomy of the human hand to make the connection between a non-opposable thumb and an absence of the thenar eminence'.[38] Krantz also acquired casts of the unique footprints he had seen at the Bossburg site. These footprints, like the handprints, had anatomical details that impressed Krantz. The left foot had a pair of bulges along the outside edge and

[30] The Patterson–Gimlin film is the 16-mm footage of a large, bipedal, primate-like creature taken by Roger Patterson and Robert Gimlin on 20 October 1967. For the accusation the film was faked and who faked it, see Greg Long, *The Making of Bigfoot*.

[31] Ivan T. Sanderson, 'First Photos of "Bigfoot", California's Legendary "Abominable Snowman",' *Argosy*, 336, February, 1968, 23–29, 72, 127–28.

[32] 'U Lecturer From West Has Hunted 'Snowman',' *Minneapolis Star*, 25 January 1968.

[33] John Green, *On the Track of Sasquatch* (Agassiz, BC, 1968), p. 74.

[34] E-mail discussion with John Green, March, 2006.

[35] Green, *On the Track of Sasquatch*, 74.

[36] *Denver News*, 3/5/1988, 1A and 10A.

[37] GSK, 'Sasquatch Handprints', *North American Research Notes*, 5, Fall (1971), 145–51.

[38] Ibid., p. 149.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

several misshapen toes. By reconstructing the skeletal structure of the foot that made the prints, Krantz concluded that the bulges were likely the result of a broken foot that had healed badly. Dubbed the Cripplefoot, it was a powerful piece of evidence. Any lingering doubt Krantz harboured over Sasquatch disappeared with the handprints and the Cripplefoot tracks.[39] Realizing he would have to produce a Sasquatch carcass or bone fragments, Krantz ran a local newspaper advertisement. He called on anyone who might have shot a Sasquatch or run one over accidentally to contact him. He promised readers 'anonymity can be assured'.[40]

Krantz often said that any hoaxer 'had to outclass me ... and I don't think anyone outclasses me ... at least not since Leonardo da Vinci'.[41] In *Bigfoot/Sasquatch Evidence* (1999) Krantz argued that a hoaxer would have to posses a special prowess 'more so than me, and I seriously doubt that any such person exists'.[42] Krantz was establishing a position of superiority and separating himself from the amateurs. The kind of anatomical knowledge needed to distinguish genuine from fake prints was something only a professional would have. Therefore, the amateurs were ill equipped for a proper study of the creature. Unfortunately, there was ample evidence that he had been fooled. In the 1980s and 1990s, skeptic Michael Dennet argued that most of the footprint casts that Krantz and others counted as genuine were not. He interviewed other scientists who thought Krantz was mistaken in his assessment of the 'detailed microscopic anatomy' Krantz claimed to have found. [43] He also pointed out that Krantz's two primary suppliers of casts, Ivan Marx and Paul Freeman, had hoaxed or were accused of hoaxing prints. Krantz's adversary, René Dahinden, lost faith in Krantz when they clashed over the Cripplefoot tracks. Dahinden, wary of Marx, felt those tracks fake. He was upset that Krantz had made them the centrepiece of his argument for the existence of Bigfoot. If he continued to do so, Dahinden told Krantz, 'I will be on your ass every inch of the way!'[44] Dahinden, a Swiss-Canadian immigrant, was a prominent amateur Sasquatch investigator and was relentless in his critique of Krantz's work. He later said that Krantz's analysis of footprint evidence as well as the Patterson film in *Bigfoot/Sasquatch Evidence* was 'so dumb and stupid that it boggles the mind'.[45] Krantz, however, was convinced they were genuine and continued on despite these attacks.

7. Gigantopithecus theory

Positing *Gigantopithecus* as theoretical progenitor of Sasquatch, Krantz thought, would make sense of all the evidence. The largest primate known to have existed, *Gigantopithecus blacki* was thought by some to have been a biped that roamed a track

[39] GSK. *Big Foot-Prints*, 43–45.
[40] *East Washingtonian*. Pomeroy, WA. 8/16/1971.
[41] Quoted in Dennett, 'Bigfoot Evidence', 500.
[42] GSK, *Bigfoot Sasquatch Evidence*, 63.
[43] Michael Dennet, 'Bigfoot Jokester Reveals Punchline—Finally', *The Skeptical Inquirer* 7:1 (Fall, 1982), 8–9, 'Evidence for Bigfoot? An Investigation of the Mill Creek 'Sasquatch Prints',' *The Skeptical Inquirer* 13:3 (Spring, 1989), 264–72, and 'Bigfoot Evidence: are these tracks real?' *The Skeptical Inquirer*, 18 (Fall, 1994), 498–508. Also see, David Daegling, *Bigfoort Exposed: An Anthropologist Examines America's Enduring Legend* (Walnut Creek, CA, 2004).
[44] René Dahinden to GSK. 3 January 1986, folder 0342, box 7, NAA.
[45] René Dahinden to John Bodley. 14 December 1995, folder 0341, box 7, NAA.

from India through Southeast Asia to China. Krantz hypothesized that populations of *Gigantopithecus*—or a *Gigantopithecus* variant—managed to migrate across the Bering land bridge along with other Asian fauna to trickle down into North America surviving in small pockets. He initially learned of *Gigantopithecus* as a graduate student when he read the work of Franz Weidenreich, the first scientist to do extensive work on the creature then known only from meagre remains unearthed in China. Once his interests turned to Sasquatch, Krantz read Weidenreich's work more closely imbibing many of Weidenreich's ideas on human evolution as well.

Franz Weidenreich (1873–1948) believed that all hominid fossil material represented one long line of descent, or continuity. Therefore, he said, 'not only the living forms of mankind but also the past forms—at least those whose remains have been discovered—must be included in the same species'.[46] Building upon the work done in Palestine by Grover Krantz's future advisor Theodore D. McCown, Weidenreich argued that the Mount Carmel, Galilee skull found at Skhūl cave in the 1930s showed that there was an intermediary between the Neanderthals and archaic modern humans.[47]

Weidenreich also described several big tooth casts anthropologist Ralph Von Koenigswald (1902–1982) had sent him from China at the outbreak of the Second World War. Von Koenigswald called them *Gigantopithecus*. Weidenreich concluded that they had come, 'from a giant man and should, therefore, have been named *Gigantanthropus* and not *Gigantopithecus*' in order to show their relationship to humans.[48] Furthermore, he asserted that the fossils from Asia 'prove that there was never a single cradle of mankind—whether located in Asia or Africa', but that humans evolved independently and simultaneously in different parts of the world.[49] Making a 'very general statement' about the overall appearance of *Gigantopithecus*, he concluded that it would have had an overall massive body plan: in other words, it would have been a big hairy humanoid.

Not long after Weidenreich published his work on *Gigantopithecus*, Bernard Heuvelmans used it to support a possible origins theory for the yeti. Though Heuvelmans articulated his thoughts on the connection between *Gigantopithecus* and the yeti in 1952 in articles in French, the English translation of his work as *On the Track of Unknown Animals* made the idea accessible to a wider audience, especially in North America where reports and legends of a creature just as Weidenreich had described had persisted for years.[50] While not ready to make a definitive statement on the subject, Heuvelmans said 'this theory, which is utterly hypothetical, provides the only entirely acceptable explanation of the mystery of the Abominable Snowman'. [51] It was also in line with Ivan Sanderson's contention of multiple anomalous primate

[46] Franz Weidenreich, *Apes, Giants and Man* (Chicago, 1945), p. 41.
[47] Theodore McCown, *Joint Expedition of the British School of Archaeology in Jerusalem and the American School of Prehistoric Research (1929–1934): The Stone Age of Mount Carmel* (Oxford, 1937–1939).
[48] Ibid., p. 49. Franz Weidenreich, 'Giant Early Man from Java and South China', *Anthropological Papers of the American Museum of Natural History* 40:1 (New York: 1945).
[49] Franz Weidenreich, 'Interpretations of the Fossil Material', in *Studies in Physical Anthropology: Early Man in the Far East*, edited by W.W. Howells (Detroit, MI: American Association of Physical Anthropologists, 1949), 149–57.
[50] Bernard Heuvelmans, 'L'Homme des Cavernes a-t-il connu des Géants mesurant 3 à 4 mètres?' *Sciences et Avenir* 61 and 62, May, 1952.
[51] Heuvelmans, *On the Track of Unknown Animals*, p. 97.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

species around the world. Krantz was soon corresponding with Heuvelmans, who had read and liked his paper on Sasquatch handprints.

8. Krantz and evolution

It is unlikely any of the North American Sasquatch hunters considered *Gigantopithecus* prior to reading Heuvelmans. Some authors made brief mentions of the work of Weidenreich after Heuvelmans but did not pursue the issue.[52] Krantz saw Weidenreich's work as a graduate student and had the deeper training to go further with it, but was nudged in the direction of finally accepting *Gigantopithecus* after reading Green and seeing the entire Patterson film. In a set of notes from the early 1970s, Krantz lays out his steps to conversion:

> Spring, 1969. first jaunts from Pullman seeking evidence.
> Saw Patterson's film.
> ~~Summer~~ got Green's book. Gigantopithecus or Australo
> Summer, 1969. First interview with witness at Hoquiam.
> Winter, 1969–70 Colville [Bossburg] incident[53]

Krantz began seriously delving into Sasquatch studies at the same time he was learning the mechanics of evolution as a graduate student, and the two realms merged for him in subtle and important ways. Krantz articulated his own views on human evolution in his doctoral dissertation *The Origins of Man* (1971) and again in *The Process of Human Evolution* (1981) employing a version of an idea that would be called regional continuity.[54] This concept, also known as the multiregional theory, found its genesis in the work of Franz Weidenreich but appeared in a more sophisticated form worked out by evolutionary biologists Milford Wolpoff and Alan Thorne in the 1970s. Wolpoff and Thorne held that instead of a single wave of already modern humans coming out of Africa and pushing out archaic hominid groups that had gone before them—population replacement theory—groups of *Homo erectus* left Africa and, in adapting to their local environmental conditions, evolved into modern humans later and separately.[55]

For Krantz the engine that drove *Homo erectus* to become *Homo sapiens* was the appearance of culture. The changeover began, he argued, when *erectus* populations developed tool making and persistence hunting. Krantz saw *Homo erectus* as little different from *Homo sapiens* anatomically. He would later say that there was 'no valid distinction between conventional *Homo erectus* and archaic *Homo sapiens*'. The difference was in the possession of cultural behaviour. [56] Krantz said there was an 'uninterrupted gene flow' between *erectus* and *sapiens*. Using Weidenreich's term, he said, 'ultimately it is a *continuum* [my italics] subdivided only by the lives of the individual organisms'.[57] The other element Krantz worked into his explanation of

[52] See Everett Ortner, 'Do 'Extinct' animals still survive?' *Popular Science Monthly* (1959), Don Oakley and John Lane, 'Earth, Stars and Man: Ape men and Giants', *Yakima Daily Republic* (2 November 1960) and Willy Ley, *Exotic Zoology* (New York, 1959).
[53] Manuscript titled 'History', folder 0344, box 7, NAA.
[54] GSK, *The Process of Human Evolution* (Cambridge, MA, 1981).
[55] For an overview of multiregionalism see Milford Wolpoff and Rachel Caspari, *Race and Human Evolution* (New York, 1997).
[56] GSK, '*Homo erectus* Brain Size by Subspecies', *Human Evolution* 10, 1995, 107–17.
[57] GSK, *The Origins of Man* (University of Minnesota, UMI Dissertation Services, 1971), p. 13.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

how *Homo erectus* turned into *Homo sapiens* was the emergence of language. He claimed that as *erectus* individuals grew to maturity, they acquired speech. This hastened along the acquisition of culture.[58]

Growing increasingly preoccupied with proving that Sasquatch was real, Krantz built supportive theoretical structures for Bigfoot into *Climatic Races and Descent Groups* (1980), which ostensibly had nothing to do with anomalous primates. Here Krantz argued that the origins of the races were located in the adaptation to local environmental conditions. The problem as Krantz saw it was that *Homo sapiens* are too young for racial diversity to have appeared in their species lifetime. The only alternative was to postulate that modern racial diversity began in earlier *Homo erectus* populations. He asserted that modern ethnic traits 'can already be seen in *erectus* times' arguing that populations of *erectus* having left their African home found their way to various corners of the world and then began to evolve into racial types and finally into *Homo sapiens.* [59] While regional continuity was being debated as the counter-point to population replacement, Krantz seems to have been oblivious to it.[60] Employing a form of regional continuity which owed more to Weidenreich than Wolpoff, Krantz was working out his explanation for the origin of the Sasquatch.[61] This theoretical model allowed him to argue that an Asiatic *Gigantopithecus* population evolved into the yeti, while another group crossed into North America and, in adapting to climatic conditions there, evolved into Sasquatch.

Krantz was working on a paradigm that would be waiting once fossils or bones of a Sasquatch were discovered. In the introductory lecture to his class in human evolution at Washington State University during the 1990s, Krantz said 'fossils are useless by themselves'—theoretical structures were crucial to their analysis.[62] He argued that the study of evolution was also a cultural process. Human fossils, he said, had been found for years, but they only became 'significant' when there existed a cultural as well as scientific framework for them to fit into. Physical evidence, he believed, said little of use about the natural world until theoretical paradigms were constructed to make sense of it. He told his students 'evolution satisfies a cultural need—origins', and so they would be studying 'personal prejudices' as well as anatomy.[63]

At the conclusion of *The Process of Human Evolution*, Krantz makes it clear that he is trying to construct an acceptable paradigm which would situate the study of anomalous primates firmly within the purview of anthropology. 'I have probably investigated the possibility of unknown hominoids', he boasted, 'more thoroughly

[58] GSK, 'Pithecanthropine Brain Size and its Cultural Consequences', *Man*, 61, May, 1961, 85–87, 'Brain Size and Hunting Ability in Earliest Man', *Current Anthropology* 9, December, 1968, 450–51, and 'Sapienization and Speech', *Current Anthropology,* 21 December 1980, 773–92.

[59] GSK, *Climatic Races and Descent Groups* (North Quincy, MA, 1980), p. 231.

[60] One of Wolpoff's first scholarly articles on regional continuity was "Telanthropus' and the Single Species Hypothesis', *Amer. Anth.*, 70, 1968, 477–93. As late as 2000 Krantz referred to Wollpoff as 'Wollpot' in an interview, and only acknowledged that the he was 'a very prominent fellow'. See Richard Noll, 'Interview with Dr. Grover Krantz', *Bigfoot Encounters.com* (1 July 2000).

[61] In *Climatic Races* Krantz never uses the words regional continuity or multiregionalism. His short bibliography contains only the works of Carleton Coon and makes no reference to the work of Milford Wolpoff or other related authors. The only reference Krantz ever made to Wolpoff was a single reference to an article for his introduction to *The Scientist Looks at the Sasquatch*, Roderick Sprague and GSK eds. (Moscow, ID, 1977), p.26.

[62] GSK classroom notes for Anthr 465/565 Human evolution, WSU (1991–2000). Folder 0439, box 10, NAA.

[63] Ibid.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

than anyone else currently active in the academic community'. He continues, 'Facts are interpretable only in the context of some pre-existing theoretical framework'.[64] Unfortunately, creating a framework that would make sense of the Sasquatch material was not proving an easy task. 'It is understandably difficult for new concepts to make headway against this array of cultural and economic forces'.[65] René Dahinden saw that Krantz was jockeying for a position as academic leader. In an interview, Dahinden, always ready with a barb, said of his nemesis, 'he certainly has a problem trying to be somebody'.[66]

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

9. Problems arise

The primary audience for Krantz's work, the scientific community, either dismissed it or thought his methodology questionable. A reviewer called *Climatic Races* 'an idiosyncratic skewing of the questions being faced in physical anthropology'. As for his idea about language and evolution, the reviewer wrote, 'the use of data and the analysis go beyond the bounds acceptable to most'.[67] Another reviewer thought it unusual to consider fingerprint patterns, cephalic index, and dental anomalies on a par with genetic traits. Krantz wanted to convince his colleagues, but had fallen woefully behind the latest work on genetics and their application to questions of hominid evolution and diversity. Reading Krantz's book the reviewer said made him feel as if 'three decades of thought and research [on genetics] had never transpired' and that the book showed 'an absence of knowledge about or an outright rejection of truly vast realms of theoretical and applied human population genetics'.[68] Milford Wolpoff, Alan Thorne and their colleagues responded negatively to Krantz as well. They claimed Krantz, like many others, did not really understand how regional continuity worked, adding 'we think it is a mistake to propose that there must be some intermediate position' between continuity and replacement theory as Krantz proposed.[69] Another weakness of Krantz's published works is that they show a lack of rigorous footnoting and only brief bibliographies which were often devoid of the latest sources.

Using *Gigantopithecus* as a model could also be problematic. Krantz said that the dentition of *Gigantopithecus* was similar to *Australopithecus afarensis*; therefore if *Australopithecus* was a biped, *Gigantopithecus* was as well. 'This creature [*Gigantopithecus*] is no more ape-like than *afarensis*', he said, 'which is indisputably bipedal'.[70] In the first description of the Indian *Gigantopithecus bilaspurensis*, E.L. Simons and S.R.K. Chopra said that 'in various ways the new specimen resembles species of *Australopithecus* . . .'[71] Krantz reasoned, if *Gigantopithecus* was a biped, so was Bigfoot. However, members of the anthropology community were divided at

[64] GSK, *Process of Human Evolution,* p. 461.
[65] Ibid., p. 466.
[66] Quoted in Robert Sullivan, 'Bigfoot', *Open Spaces Quarterly* 1:3 (1999).
[67] M. Estellie Smith, 'Review of *Climatic Races*', *Annals of the American Academy of Political and Social Science* 453 (January, 1981), 290–91.
[68] Robert B. Eckhardt, 'Review of *Climatic Races*', *American Anthropologist*, 84 (June, 1982), 454–56.
[69] David Frayer, Milford H. Wolpoff, Alan G. Thorne, Fred H. Smith and Geoffrey G. Pope, 'Resolving the Archaic-to-Modern Transition: A Reply', *American Anthropologist*, 96, March, 1994, 152–55.
[70] GSK, *Process of Human Evolution*, p. 238.
[71] E.L. Simons and S.R.K Chopra, 'Gigantopithecus (Pongidae Hominiodea) A New Species from North India', *Postilla*, 138 Peabody Museum, Yale University (1 October 1969), 1.

the time about just what *Gigantopithecus* was. In 1956, Pei Wenzhong (1904–1982), one of the fathers of paleoanthropology in China, said of *Gigantopithecus* 'the basic nature of this animal was that of an ape'.[72] Yet Pei also argued with Weidenreich that the name should have been *Gigantanthropus* and felt the creature over twelve feet tall and was 'approaching the status of man'.[73] Yale paleanthropologist David Pilbeam and a number of others felt the dentition of *Gigantopithecus* showed it was a pongid, an ancestor to the orangutan. Pilbeam argued that just because *Gigantopithecus* had human-like teeth did not mean it was necessarily related to the human line.[74] In 1986, California State University anthropologist Bruce Gelvin stated: '*Gigantopithecus* is an extinct side branch of the Hominidae'.[75] Just how this debate over *Gigantopithecus'* place in the hominid line would have changed Krantz's position is unclear. Just as he ignored the continuity versus replacement conversation, Krantz does not seem to have bothered to take into account what other paleoanthropologists were saying about the nature of *Gigantopithecus.*

10. Conflict with the Establishment

Generating little interest in his colleagues, Krantz spread his *Gigantopithecus* theory mostly by word of mouth, non-academic publications, and his appearance on such television shows as *In Search Of* and *Arthur C. Clarke's Mysterious World*. Stymied by his inability, with one exception, to get his work published in scholarly journals, he put out books on Sasquatch geared to the popular market, none of which helped his reputation as a scholar. Such forays into the popular media tend to undermine scientific credibility. Thor Heyerdahl (1914–2002), the Norwegian ethnologist, was looked down upon by colleagues for his *Kon-Tiki* voyages across the Pacific in 1947. American zoologist William Beebe (1877–1962) created similar popular interest with his record deep sea Bathysphere dives around the same time.[76] British 'parapsychologist' Harry Price was often in the public press discussing his work.[77] They were all criticized for having left serious science behind for activities that were seen as little more than publicity stunts.

Hoping to make a public impact himself, Krantz tried to formalize Bigfoot by assigning it a binomial designation. At the January 1985 meeting of the International Society of Cryptozoology held in Sussex, England, he presented the paper, 'A Species Named from Footprints'. He felt this 'should serve to structure further enquiry into this matter along sober lines, and to discredit some of the unfounded speculation'.[78] Krantz was acutely aware of the perception that anomalous primate studies constituted pseudo-science in the minds of most of his colleagues so wanted to distance his work from what he considered the lunatic fringe.

[72] Wen Chung Pei, 'Giant Ape's Jawbone Discovered in China'' *Amer. Anth.* 59 (October, 1957), 834–38 and 'Excavation of Liucheng *Gigantopithecus* cave and exploration of other caves in Kwangsi', Institute of Vertebrate Paleontology and Paleoanthropology, *Academica Sinica* 7 (Peking, 1965).
[73] Pei, 'Excavation of Liucheng' p.836.
[74] David Pilbeam, 'Gigantopithecus and the Origins of Homimidae', *Nature*, 225 (7 February 1970), 516–19.
[75] Bruce R. Gelvin, 'Morphometic Affinities of Gigantopithecus', *American Journal of Physical Anthropology*, 53 (1986), 541–68.
[76] Carol Grant Gould, *The Remarkable Life of William Beebe: Explorer and Naturalist* (Washington, DC, 2004).
[77] Tom Ruffles. 'Displaying the Paranormal', *Fortean Times*, 229 (December, 2007), 38–41.
[78] GSK notes in folder 0333, box 7, NAA.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

There had been a somewhat successful monster-naming attempt ten years before Krantz's. British naturalist Sir Peter Scott and American lawyer/engineer Robert Rines put forward the name *Nessiteras rhombopteryx* for the famous lake monster from Scotland. Rines had taken a group of underwater photos—he was a specialist in high-resolution imaging—of the creature which had attracted much attention, even rating an article in *Nature*.[79] Ten years after Krantz's attempt, marine biologist Edward Bousefield argued for the scientific name of *Cadborosaurus willsi* for the lake monster from British Columbia.[80] These attempts to name anomalous creatures were based on the argument that they were related to known fossil forms (plesiosaur for Loch Ness and zueglodon for *Cadborosaurus*).

With great hopes, Krantz began his Sussex presentation by explaining that as *Gigantopithecus* existed and conformed to the Sasquatch evidence, it was reasonable to assume that the two were related. The evidence he used to support his bid to name the creature was a trio of casts made from footprints found on 16 June 1982 in the Umatilla National Forrest, Washington State, by forest worker Paul Freeman. His evidence consisted only of plaster casts, but Krantz said, 'I fail to see a good reason why this should make any difference in their acceptability' as type specimens.[81] Krantz's first choice for the animal was to simply call it *Gigantopithecus blacki*. If it was a relative of this creature, he proposed the name *Gigantopithecus canadensis*. (In 1974 Krantz's Russian friend Boris Porshnev proposed the name *Troglodytes recens*.)[82] Bernard Heuvelmans told Krantz he should have named it *Sasquatchicus krantzii*.[83]

Following the conference, Krantz sent the paper to editor Leigh Van Valen at the University of Chicago Press hoping to get it published.[84] Van Valen sent it out to a reviewer, who turned the paper down saying that naming a species 'conditionally' as Krantz suggested was problematic. He found fault with the notion that 'it is based entirely on the assumption that some crucial traits will be similar to living apes and that a mandible with horizontal rami means bipedality'. Krantz had argued that the shape of the *Gigantopithecus* jaw was an indication of bipedalism. The reviewer pointed out that many living apes have a similar jaw morphology but are not bipeds. The reviewer also could not resist looking for other reasons for the attempt to name the creature suggesting that Krantz wanted to name Bigfoot before the creature was proven to exist 'in the hope that if it should turn out to be correct, he will be recognized as a prophet'. [85] In their work on *Gigantopithecus* Ciochon, Olsen, and James said that Krantz had 'stepped outside the bounds of science: zoological names

---

[79] Sir Peter Scott and Robert Rines, 'Naming the Loch Ness Monster', *Nature*, 258 (11 December 1975), 466–68.

[80] Edward Bousefield and Paul LeBlond, 'An account of *Cadborosaurus willsi*, new genus, new species, a large aquatic reptile from the pacific coast of North America', *Amphipacifica Journal of Systematic Biology 1 supplement* 1 (1995), 1–25.

[81] Krantz included this line of thinking in *Big Footprints: A Scientific Inquiry Into the Reality of Sasquatch* (Boulder, CO, 1992).

[82] Boris Porshnev, 'The Troglodytidae and the Hominidae', *Current Anthropology*, 15, 449 (1974), 450. Porshnev believed that the anomalous primates reported in Asia were Neanderthal survivals not *Gigantopithecus* descendants. For the Russian approach see Myra Shackley, *Still Living? Yeti, Sasquatch, and the Neanderthal Enigma* (New York, 1983).

[83] Bernard Heuvelmans to GSK, 8/13/1985, folder 0340, box 7, NAA.

[84] Van Valen and Krantz were friends and both members of the International Society of Cryptozoology.

[85] Leigh Van Valen to GSK, 1/21/1986, folder 0333, box 7, NAA. See same folder for the reviewer's notes.

are always assigned to type specimens ... something which is lacking in the case of Sasquatch'.[86] Heany and then Meldrum later said that it was not Krantz's idea of naming the creature, but his procedure that was problematic.[87]

11. Dermal ridges

In addition to the work of Franz Weidenreich, research of the controversial anthropologist Carleton Coon (1904–1981) made an impression on Krantz.[88] Coon, who worked on ethnic diversity and the origin of the races, took a typological approach to race and evolution. A common technique of early physical anthropology, typology was a way of comparing human physical types by measuring skeletons to assess the similarities and differences. While Krantz rejected the racist aspects of typology, he employed typological techniques of data acquisition in order to build a biomechanical image of Bigfoot. He did reams of mathematical calculations based on a comparison of the tracks and the Patterson film to work out if the creature made sense anatomically. He speculated about the size of family groups, rogue males, territoriality and other aspects of presumed Bigfoot behaviour.[89] He worked out the creature's weight, its height-to-stride-length ratios, and foot structure. He also commissioned the first life-size reconstruction of a *Gigantopithecus* skull and jaw for comparative and illustrative purposes.[90] The track prints suggested to him that 'an 8ft. tall, heavily built hominid would require certain structural modifications to its feet because of its great absolute body weight'.[91] Along with the casts he employed physical data from 'stoutly built men' taken from William Sheldon's *Atlas of Men* (1954) as a baseline to build up a reasonable outline of the creature's curves.[92] All this suggested to Krantz that the creature could exist. Besides the biomechanical data, Krantz had one other piece of evidence to suggest it was real.

As the most abundant physical evidence he had, Krantz focused on the details of the footprint casts. Beginning with the Bossburg tracks, he discovered what he thought were dermal ridges on the soles of the feet. An eclectic group, including a palm reader, examined this evidence.[93] He sent out his findings to anthropologists and law-enforcement personnel who were specialists in fingerprinting techniques. Professor Ripu Singh of the University of Windsor, Ontario studied the casts

[86] Russell Ciochon, John Olsen and Jamie James, *Other Origins: the search for the great apes in human prehistory* (New York, 1990), p. 228.

[87] M. Heany, 'A more appropriate procedure for naming Sasquatch', *Cryptozoology* 9 (1990), 52–56 and D. Jeffrey Meldrum, 'Ichnotaxonomy of giant hominoid tracks in North America', Cenozoic Vertebrate Tracks and Traces, *New Mexico Museum of Natural History and Science Bulletin*, 42 (2007), 225–31.

[88] For Coon's life see Carleton Coon, *Adventures and Discoveries: the Autobiography of Carleton S. Coon* (Englewood Cliffs, NJ, 1981). Coon and Krantz became friends and Coon commiserated with Krantz over the fact that other anthropologists were not accepting his Sasquatch work. Coon asked rhetorically 'what could stuffy academic pedants do if they had to cope with new ideas every few minutes?' Coon to GSK, 3/19/1977, folder 0336, box 7, NAA. Coon's work appears in the bibliographies of several of Krantz's books and papers.

[89] GSK. 'Growing up Sasquatch', folder 0316, box 6, NAA.

[90] See folder 0433, box 10, NAA.

[91] GSK, 'Additional Notes on Sasquatch Foot Anatomy', *Northwest Anthropological Research Notes,* 6, Fall, 1972, 230.

[92] William Sheldon, *Atlas of Men: A Guide for Somatotyping the Adult Male at all Ages* (New York: Gramercy, 1954).

[93] See folder 0317, box 6, NAA.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

closely with his graduate students. They were puzzled by the fact that they did not see the usual dermal ridge patterns like cores and deltas that they expected to find on a print made by a living animal.[94] Professor A.G. de Wilde of the University of Groningen, The Netherlands, looked at the material Krantz sent him and declared that the prints 'are not from some dead object with ridges in it, but come from a living object able to spread its toes'. [95] Attempts were made to have the FBI and Scotland Yard look at the dermal prints. John Berry, a fingerprint expert and editor of the journal *Fingerprint Whorld*, told Krantz Scotland Yard thought the prints probably real.[96] A Nike Sneaker Company spokesman gently declined the offer to examine the tracks but said, however, that Nike had made custom sports shoes for athletes that had shoe sizes similar to the Bigfoot casts.[97]

Even with the dermal ridge evidence, Krantz was not getting the kind of professional attention he felt the work deserved. He wrote an article on the ridges for the journal of the International Society of Cryptozoology, but it drew no reaction.[98] Richard Greenwell, the president of the society told Alex Roche, president of the American Dermatoglyhics Association, that he could not get anyone outside the cryptozoology community to examine Krantz's article or evidence.[99] Later, John Berry and Stephen Haylock, published 'The Sasquatch Foot Casts', in *Fingerprint Whorld*.[100] After that, Krantz lamented that he was unable to continue the dermal ridge angle because he was physically exhausted and had run out of funds.[101] 'Having lost this battle almost totally', he sighed, 'I am reluctant ... to pursue this line any further'.[102]

His health having deteriorated, Krantz retired from Washington State in 1998. He tried to get several more papers published—including one where he continued to link language to genetics—without success. His last attempt came in February of 2001 when he submitted 'Neanderthal Continuity in View of Some Overlooked Data' to the journal *Current Anthropology*. Editor Benjamin Orlove rejected it. Krantz was still suffering from a career long writing problem: his paper did not make use of or even reference to the latest scholarship on the topic. Orlove also told him that the tone of the paper was 'jarring and unacademic'.[103] Krantz rewrote and resubmitted the paper, but it was still unsuitable. In one last painful rejection, the blind reviewer said that 'the paper has an odd tone of someone who feels he has been wronged over the course of his career'.[104] Grover Krantz passed away in 2002, no closer to his goal than the day he started.

12. Conclusion

Monster hunting had its problems apart from the question of whether or not the creatures existed. Although he worked to distance himself from the amateurs,

[94] See correspondence between Ripu Singh and GSK, folder 0330, box 6, NAA.
[95] A.G. de Wilde to GSK, 1/3/1984, folder 0332, box 6, NAA.
[96] John Berry to GSK, 9/3/1984, folder 0331, box 6, NAA.
[97] Nike representative John Robinson to Ed Palma, 12/22/1982, folder 0333, box 7, NAA.
[98] GSK, 'Anatomy and Dermatoglyphics of Three Sasquatch Footprints', *Cryptozoology*, 2, 1983, 53–81.
[99] Richard Greenwell to Alex Roche, 9/13/1985, folder 0333, box 7, NAA.
[100] John Berry and Stephen Haylock, 'The Sasquatch Foot Casts', *Fingerprint Whorld*, January, 1985, 59–63.
[101] Krantz never received any university funds to pursue his work instead paying his own expenses.
[102] GSK, *Bigfoot/Sasquatch,* p. 86.
[103] Benjamin Orlove to GSK, 2/15/2001, folder 0247, box 4, NAA.
[104] Review sent by Benjamin Orlove to GSK, 9/4/2001, folder 0247, box 4, NAA.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

Krantz's obsessive pursuit of anomalous primates was as problematic for him as it was for them. As Donna Haraway points out, studies of primates show that 'love and knowledge are richly ambiguous and productive of meanings in which many people have a stake', as both he and amateurs had.[105] As with the studies of known primates, research on their anomalous relatives has its own set of narratives, politics and myths about evidence, authority and legitimacy.

While others had been able to give official names to their monsters, Krantz was unable to do even that. When Bousefield and LeBlond argued for the existence of the Cadborosaurus lake monster, they put forward evidence that remains of the creature had been found in the past and had been identified as such. Robert Rines and Peter Scott did the same for the Loch Ness Monster. (Excitement over their 'Nessie' photos soon faded, however, when it was discovered that the images had been enhanced to appear more convincing).

The amateur naturalists of the eighteenth and nineteenth centuries contributed in many ways to the burgeoning of professional science. They had a long history of introducing new species, ideas, and methods which were adopted and advanced by scientists. They also experienced what David Allen calls the 'eventual combining' of amateur and professional spheres.[106] The monster hunters, however, failed to ever really contribute anything to zoology, biology, or anthropology. Like their predecessors, they created a republic of letters (eventually making extensive use of the Internet to exchange ideas) and established societies but only among themselves. Their ideas did not become part of the wider scientific discourse. While other amateur naturalists put together data on geologic formations, botanical processes, bird populations, and animal behaviour, which contributed to biological systemization and evolution theory, the monster hunter's data were looked at by few scientists other than Grover Krantz. Indeed, the only remotely theoretical structures made by the anomalous primate enthusiasts were Bernard Heuvelmans' *Gigantopithecus* connection (1958), Ivan Sanderson's contention of Sasquatch diversity (1961), and Boris Porshnev's Neanderthal survival theory (1970s), none of which was advanced or even widely agreed upon by their intellectual descendents. The amateurs still swarm the woods like bird watchers to gather sightings and evidence of their prized species, and though they carry high-tech equipment, they have no unifying research paradigms. Ghost hunters suffer from the same disability. Their techniques have not fundamentally changed since the 1930s and 1940s when Harry Price first applied a 'scientific' approach and modern technology to the attempt to prove the physical existence of spirits.[107] There has been no 'great combining' of amateur and professional spheres in the dubious realms as there had been with other amateur naturalists.

While he tried to apply theoretical science to monster hunting, Krantz suffered from a conceptual problem. Even scientists who were sympathetic to the idea of anomalous primates felt the evidence lacking. As far back as 1958, William Straus of Johns Hopkins University told the monster enthusiasts that the reason he was unwilling to accept the reality of these creatures was because he was 'only adhering to the basic tenet of scientific procedure when I ask for ... positive proof of its

[105] Haraway, 1.
[106] Allen, 227.
[107] Ruffles, 2007.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

reality'.[108] Krantz shared this problem with other scientists who ventured into realms others thought dubious. UFO researchers like physicist Stanton Friedman, Loch Ness Monster hunter Robert Rines, and legions of ghost hunters and conspiracy theorists have for years tried unsuccessfully to convince academics. They have brought forward original documents, photos, and moving images of otherworldly spirits and flying saucers that have, like the Patterson film, captured the imagination, but little else.[109]

Krantz extrapolated anatomical details from footprint casts and the Patterson film according to straightforward—if outdated—anthropological techniques. He rejected wild claims from amateurs and accepted only empirical evidence he felt passed rigorous tests and guidelines for authenticity. He went about studying the creature in as sober, logical, and scientific a manner as he could, yet failed in his attempt to bring anomalous primates to the anthropological community. In his analysis of the Loch Ness monster evidence, ecologist John Lawton said 'we can bring a nice array of empirical data and theoretical understanding to predict the likely population size of a mythical beast'.[110] This is just what Krantz thought he was doing with Bigfoot. The problem, Lawton argued, is that it was just not enough.

Krantz had tried to strengthen his position by linking Sasquatch to a theory of human origins, but the evidence was not sufficient to convince scientists. The footprint casts were erratic and unpredictable in that they were not uniform. The dermal ridges were only recognized by some investigators, and the Patterson film was at best inconclusive. Contrary to the popular assumption that enthusiasts would accept any evidence in support of Bigfoot, the more serious amateurs did attempt to evaluate the evidence skeptically and often rejected as fake material Krantz accepted as genuine. They had not, however, established uniform criteria to judge their evidence, which is crucial for new fields of research to move forward.[111]

In his discussion of ostracized scientists, Jan Sapp argues that geneticist Franz Moewus also suffered from the problem of dubious evidence.[112] Moewus' experiments were unusual and did not conform to accepted norms resulting in accusations of faked evidence. The geneticists of Sapp's study attempted to create a new paradigm in the understanding of heredity using radical new techniques and study subjects. Krantz did not introduce radical techniques; indeed he was criticized for using out-of-date methods and for not being as well versed in genetics as he should have been. Instead of jumping forward, he seemed stuck in the past. Though academically trained, Krantz's arguments were not technically rigorous enough to sway colleagues, often leaving them unimpressed if not baffled. Public statements that he could not be fooled by hoaxers undermined his status as a scientist and opened him up to ridicule by amateurs when he was fooled.

[108] William Straus. 'Abominable Snowman', *Science*, 127, 3303 (18 April 1958), 882–84, 883.

[109] The recent discoveries on the Indonesian island of Flores of the 'Hobbit' are seen by some as support for legends of the Orang-Pendek (a diminutive Sasquatch-like anomalous primate) and thus makes the existence of Sasquatch and others that much more plausible. See Henry Gee, 'Flores, God and Cryptozoology', *BioEd Online* (27 October 2004) and Gregory Forth, 'Hominids, hairy hominoids and the science of humanity', *Anthropology Today*, 21 (June, 2005), 13–18.

[110] John Lawton. 'Nessiteras rhombopteryx', *Oikos*, 77 (1996), 378–80.

[111] *Responsible Science Volume 1: Ensuring the Integrity of the Research Process* (Washington, DC, 1992).

[112] Sapp. *Where the Truth Lies.*

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014

An examination of Krantz's career contributes to the ongoing discourse on the relationship between amateur and professional scientists, the question of evidence, and the trend of natural history fields being created by amateurs then taken over by professionals. The amateur monster hunters were insulted that mainstream science would not join them in the hunt. When the monster hunters bring in a specimen, as Krantz argued they had to, then scientists will join them in numbers. Then, the 'combining' will begin, as will the displacing.

Acknowledgements

I would like to thank Peter Bowler and Joe Cain for their enthusiasm and help with this project. Thanks to the blind reviewer who made a number of very helpful suggestions and comments. Also thanks to the Kean University history department for their support and to Chris Bellitto, Christine Janus, Frank Wyman, Dawn Digrius, Christopher Murphy, and John Green for reading all of or part of the manuscript. The staff at the National Anthropological Archive were invaluable in dealing with the Krantz papers. Thanks to Garland Allen for his support and to Lisa Nocks for everything.

Downloaded by [Memorial University of Newfoundland] at 17:48 07 October 2014